

WHAT IS CLAIMED IS:

1. A memory system controlling data access, comprising:
  - a memory device comprising a retire buffer;
  - a memory controller receiving a read request, and comprising:
    - an un-retired data buffer capable of holding at least one write address associated with un-retired write data stored in the retire buffer; and
    - a comparator receiving and comparing the at least one write address with a read address associated with the read request;
  - wherein upon determining in the comparator that the at least one write address and the read address are the same, the read request is stalled in the memory controller.